

* SWBAT apply work, power, and energy as needed

Sep 6-2:31 PM

Welcome!!!

Centering...

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SECA Physics
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- * Pick up:
 - slip of paper (for later)

Eureka: KE

http://www.youtube.com/watch?v=gbtK_EG2Gao

Opening Questions:

What do we measure with Watts? with Joules?

POWER

ENERGY
WORK

$$mgh = \frac{1}{2}mv^2$$

↑

Algebra extra credit: (index card with name)

$$PE = mgh$$

Top

$$KE = (1/2)mv^2$$

Bottom

If an object starts at a certain height and then all the PE is converted to KE, how fast will it be going (what is "v")?

Sep 7-7:04 AM

Catchy Physics Phrases

Work IS WHEN A FORCE CAUSES A DISPLACEMENT.

Energy IS THE ABILITY TO DO WORK

Power IS WORK OVER TIME

Dec 5-7:14 AM

$$PE = mgh$$

$$KE = (1/2)mv^2$$

If an object starts at a certain height and all the PE is converted to KE, how fast will it be going (what is "v")?

Worksheet

$$\cancel{m}gh = \frac{1}{2}\cancel{m}v^2$$

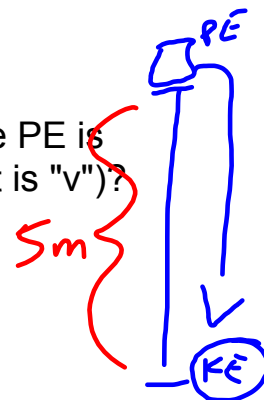
$$2 \cdot gh = \frac{1}{2}v^2 \cdot 2$$

$$\sqrt{v^2} = \sqrt{2 \cdot g \cdot h}$$

$$h = 5m$$

$$v = \sqrt{2 \cdot g \cdot h}$$

$$v = \sqrt{2(10\text{ m/s}^2)(5\text{ m})} = 10\text{ m/s}$$



Dec 6-7:08 AM

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

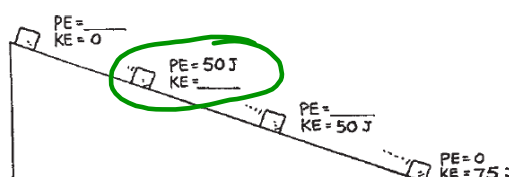
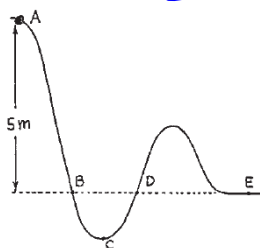
Sep 9-7:32 AM

1. What is the **power** output of an engine that does 60,000 J of work in 10 seconds?

6000W

2. What value goes in the circle?

25 J



3. At which point is the KE (speed) the greatest? C

Dec 2-7:55 AM

1. Power is
 - A. a push or a pull
 - B. when a force causes a displacement
 - C. work over time
2. What was the general range of power results for our experiment?
3. Which is bigger 1 Watt or 1 horsepower?

Dec 2-7:55 AM